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10/527,651

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EXAMINER

SU, SARAH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,651	Applicant(s) OMORI ET AL.	
	Examiner Sarah Su	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 2-8 and 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/14/05, 5/30/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are presented for examination.

Priority

2. The claim for priority from PCT/JP03/11804 filed on 17 September 2003 is duly noted.
3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. The disclosure is objected to because of the following informalities:
 - a. in page 2, lines 4-9: this statement does not constitute a comprehensible complete sentence;
 - b. In page 2, lines 11-12: "is A data processing method performed" should read –is performed–;
 - c. in page 2, lines 23-24: "processing device, a second" should read – processing device; a second–;
 - d. in page 3, line 5: "key data, and" should read –key data; and–;

- e. In page 4, line 2: “judges decryption” should read –judges that decryption–
;
- f. in page 4, lines 24: “device, a fifth” should read –device; a fifth–;
- g. in page 5, line 4: “received –in the fourth step, a” should read –received in
the fourth step; a–;
- h. In page 5, line 9: “authentication, and a” should read –authentication; and
a–;
- i. in page 15, line 21: “as followings is” should read –as following is–;
- j. in page 16, line 9: “uses the first” should read –use the first–.
- k. It is noted that the errors in the specification are too numerous for the
Examiner to particularly specify.
Appropriate correction is required.

Claim Objections

- 6. Claims 2-8 and 10-12 are objected to because of the following informalities:
 - a. In claims 2-4, line 1: “A data processing method” is unclear if it relates to
”A data processing method” (claim 1, line 1);
 - b. In claim 4, line 12: “a predetermined generation method” is unclear if it
relates to “a predetermined generation method” (claim 4, line 3);
 - c. In claim 4, line 14: “-in the fourth” should read –in the fourth–;
 - d. In claim 5, line 11: “the authentication” lacks antecedent basis;
 - e. In claim 5, lines 17-18: “the decryption data” lacks antecedent basis;

- f. In claim 5, line 23: "decryption data" is unclear if it relates to "the decryption data" (claim 5, lines 17-18);
- g. In claim 5, lines 23-24: "obtained the decryption" should read –obtained by the decryption–;
- h. In claim 6, line 10: "data obtained the" should read –data obtained from the–;
- i. In claim 7, line 1: "A data processing method" is unclear if it relates to "A data processing method" (claim 6, line 1);
- j. In claim 7, lines 4-5: "the first authentication key data" lacks antecedent basis;
- k. In claim 7, line 6: "predetermines generation" should read –predetermined generation–;
- l. In claim 8, line 7: "an authentication side" is unclear if it relates to "an authentication side" (claim 8, lines 2-3);
- m. In claims 11 and 12, line 1: "A data processing method" is unclear if it relates to "A data processing method" (claim 1, line 1);
- n. In claim 11, line 6: "the key data" lacks antecedent basis;
- o. In claim 11, lines 12-13: "a predetermined generation method" is unclear if it relates to "predetermined generation method" (claim 11, line 5);
- p. In claim 11, lines 21-22: "the first authentication use data" and "the second authentication use data" lack antecedent basis.

Appropriate correction is required.

Drawings

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:

- a. reference characters "15_1, "15_2 and 15_3" have been used to designate service businesses (page 28, line 12) and the personal computers" (page 31, line 16);
- b. reference characters "15_1, 15_2, and 15_3"" and "16_1, 16_2, and 16_3" have both been used to designate service businesses (claim 28, line 12; col. 31, lines 15-17).

8. The drawings are objected to because:

- a. in Figure 4, "STST97" should read –ST97–;
- b. in Figure 8, "TOOL52" should read –TOOL 52–.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

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remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1, 5, 7, 10, and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1 recites "the second data processing device uses the decryption data as the data is effective" in lines 25-26. This is unclear as to what the applicant is claiming. For the purposes of examination, the examiner interprets this as "the second data processing device uses the decryption data as the data that is effective" for the remainder of this Office Action. A similar limitation is also recited in claim 5, lines 21-22.

b. Claim 7 recites the limitation "uses the data outputted in the third step as the data is effective" in lines 9-10. This is unclear as to what the applicant is claiming. For the purposes of examination, the examiner interprets this as "uses

the data outputted in the third step as the data that is effective” for the remainder of this Office Action.

c. Claim 10 recites the limitation “a third step of using the data obtained by the decryption in the second step as the data is effective” in lines 10-11. This is unclear as to what the applicant is claiming. For the purposes of examination, the examiner interprets this as “a third step of using data obtained by the decryption in the second step as the data that is effective” for the remainder of this Office Action. A similar limitation is also recited in claim 14, lines 10-11.

d. Claim 13 recites the limitation “control means for using data obtained by the decryption of the decryption means as the data is effective” in lines 12-13. This is unclear as to what the applicant is claiming. For the purposes of examination, the examiner interprets this as “control means for using data obtained by the decryption of the decryption means as the data that is effective” for the remainder of this Office Action.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 9 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are drawn to a computer program per se. Computer programs claimed as computer listings per se are abstract instructions. Computer programs are

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neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. As such, these claims are not directed to one of the statutory categories of invention (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

Please note that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (electromagnetic signals or carrier waves).

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Oishi et al. (EP 1037131 A2 and Oishi hereinafter).

As to claims 1, and 8-9, Oishi discloses a system and method for mutual identification between apparatuses, the system and method having:

a first step by which the first data processing device uses the first authentication key data and the second processing device uses the second authentication key data, and authentication is performed between the first data processing device and the second data processing device (0013, lines 5-13);

a second step by which when the second data processing device- verifies the first data processing device by the authentication in the first step, the first processing device uses the encryption key data for encryption (0120, lines 1-3) and decrypts encrypted data provided to the second data processing device by using the decryption key data (0122, lines 1-3),

a third step by which when the second data processing device judges that decryption data obtained by the decryption in the second step is decrypted adequately, the second data processing device uses the decryption data as the data is effective (i.e. legitimate) (0107, lines 1-6).

As to claim 2, Oishi discloses:

in the first step, the first data processing device and the second data processing device perform encryption and decryption of predetermined data based on a first encryption algorithm and a first decryption algorithm corresponding to the first encryption algorithm and perform the authentication (0027, lines 1-3; 0120, lines 1-3; 0122, lines 1-3),

in the second step, the second data processing device decrypts the encrypted data encrypted based on a second encryption algorithm based on a second decryption algorithm corresponding to the second encryption algorithm (0027, lines 1-3; 0149, lines 1-4).

As to claim 3, Oishi discloses:

wherein the first data processing device is verified in the second step, when the second data processing device judges that the first authentication key data and the second authentication data are the same by the authentication in the first step (0107, lines 1-6).

As to claim 4, Oishi discloses:

a fourth step by which the first data processing device (i.e. portable player) provides key designation data (i.e. random number) designating key data used for generation of the first authentication key data to the second data processing device (i.e. portable storage device) (0096, lines 3-6),

a fifth step by which the second data processing device generates the second authentication key data by a predetermined generation method by using the key data designated by the key designation data received in the fourth step (0096, lines 7-11),

a sixth step by which the first data processing device uses the first authentication key data and uses the second authentication key data generated by the second data processing device in the fifth step to perform the authentication (0099, lines 1-2),

a seventh step by which when the second data processing device judges that the first authentication data and the second authentication data are the same, the first data processing device is verified (0107, lines 1-6).

As to claim 5, Oishi discloses:

a first data processing device holding first authentication key data and encryption key data (0013, lines 5-13),

a second data processing device holding second authentication key data corresponding to the first authentication key data, and decryption key data corresponding to the encryption key data (0120, lines 1-3; 0122, lines 1-3),

wherein the first data processing device uses the first authentication key data and the second data processing device uses the second authentication key data, and the authentication is performed between the first data processing device and the second data processing device (0120, lines 1-3; 0122, lines 1-3),

the second data processing device decrypts encrypted data provided to the second data processing device by the first data processing device by using the encryption key data for encryption by using the decryption data, when the second data processing device verifies the first data processing device by the authentication (0149, lines 1-4),

the second data processing device uses the decryption data as the data is effective, when the second data processing device judged

decryption data obtained the decryption is decrypted adequately (0107, lines 1-6).

As to claim 6, Oishi discloses:

a first step of performing authentication with an authenticated side by using the authentication key data (0013, lines 5-13),

a second step of encrypting predetermined data by using the encryption key data after the authentication in the first step (0120, lines 1-3),

a third step of outputting data obtained the encryption in the second step to the authenticated side (0120, lines 1-3).

As to claim 7, Oishi discloses:

a fourth step of providing key designation data (i.e. random number) designating the key data used when the first authentication key data is generated based on the predetermined generation method to the authenticating means (i.e. portable storage device) (0096, lines 3-6),

a fifth step of performing the authentication with the authenticating means by using the first authentication key data (0099, lines 1-2).

As to claims 10, 13 and 14, Oishi discloses:

a first step of performing authentication with means to be authenticated by using the authentication key data (0013, lines 5-13);

a second step of decrypting data-received from the means to be authenticated by using the decryption key data (0122, lines 1-3),

a third step of using data obtained by the decryption in the second step as the data is effective, when verifying the means to be authenticated by the authentication in the first step (0107, lines 1-6).

As to claim 11, Oishi discloses:

a fourth step of receiving key designation data designating the key data from the means to be authenticated (0096, lines 7-11),

a fifth step of generating second authentication key data by a predetermined generation method by using the key data designated by the key designation data received in the fourth step (0096, lines 7-11)),

a sixth step of performing the authentication with the means to be authenticated using the first authentication key data for the authentication by using the second authentication key data generated in the fifth step (0099, lines 1-2),

a seventh step of verifying the means to be authenticated when judging that the first authentication use data and the second authentication use data by the authentication are the same in the sixth step (0107, lines 1-6).

As to claim 12, Oishi discloses:

wherein, a function of a data processing device permitted by the means to be authenticated related to the key data, or an access to data held by the data processing device is executed in the third step (0002, lines 1-7; 0142, lines 2-6). The examiner asserts that since Oishi discloses that audio and

other data is protected from use without mutual apparatus identification, then one of ordinary skill in the art would understand that audio and other data would be available for use if mutual identification were successful.

Prior Art Made of Record

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Shibata et al. (US 2001/0034715 A1) discloses a device for decrypting encrypted content.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Su whose telephone number is (571) 270-3835. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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/Sarah Su/
Examiner, Art Unit 2131

**/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2131**